NEUROBIOLOGY OF AGING

Index to

VOLUME 3

NEUROBIOLOGY OF AGING

VOLUME 3 1982

SUBJECT INDEX

Acetylcholine, 105
  Alzheimer's disease
  memory
  physostigmine
  signal detectability analysis
Age differences
  auditory brainstem responses, 163
  auditory evoked potentials, 163
  cats, 163
  central conduction time, 163
  circadian rhythms, 299
  click threshold, 163
  entrainment, 299
  ethanol, 243
  human studies, 299
  hypothermia, alcohol-induced, 243
  lecithin, 223
  maze learning, 223
  righting response, 243
  sleep, 299
  temperature, 299
  vitamin E, 223
Age pigment, 187
  aging auditory system
  brainstem neuron loss
  superior olive
  trapezoid body, medial nucleus
Aged rats, 141
  anesthesia
  carbon dioxide
  cerebral metabolism
  cerebrovascular response
  hypercapnia
Aging
  antiparkinsonian drugs, 379
  apnea, 329
  astrocytic hypertrophy, 179
  benzodiazepine binding sites, 227
  benzodiazepines, 379
  biorhythms, 287
  C57BL/6 mice, 31
  central nervous system, 23
  cerebral cortex, 179
  chronobiology, 287
  circadian rhythm, 287
  cognition, 1
  corticosteroids, 379
  depression, 351
  dopamine metabolism, 23
  electroencephalograph, 351
  estrous cycle, 31
  FSH, 31
  GABA binding sites, 227
  heart rate, 1
  human studies, 321, 329, 379
  hypnotic drugs, 329
  information processing, 1
  lesions, medial frontal cortex, 69
  LH, 31
  loss of binding sites interaction, 227
  MHPG-SO_4, 233
  neurobiology, 287
  nocturnal myoclonus, 329
  noradrenaline metabolism, 233
  noradrenergic system, 23
  norepinephrine metabolism, 23
  periodic movements, 329
  prolactin, 31
  reaction time, 1
  recovery of function, 69
  retina, 227
  serial lesion effect, 69
  serotonin metabolism, 23
  sleep, 287, 329, 351, 379
  sleep fragmentation, 321
  sleep stages, 321
  spatial alternation, 69
  stress, 233
  sustained potential, 1
  synaptic remodelling, 179
  tricyclic antidepressants, 379
  tyrosine hydroxylase metabolism, 23
Aging and hormonal changes, 37
  cortisol levels
  diurnal variations
  estradiol levels
  LH levels
  rhesus monkeys
  sexual behavior, male monkey
  testosterone levels
Aging and neuronal activity, 43
  cross-sectional studies
  deoxyglucose mapping
  longitudinal studies
  multiple unit recording
Aging auditory system, 187
  age pigment
  brainstem neuron loss
  superior olive
  trapezoid body, medial nucleus
Aging, female rat, 253
  estrous cycle
  luteinizing hormone
  neuroleptics
  serotonin
Aging Fischer 344 rats, 247
  CB-154
  hyperprolactinemia
  LHRH
  prolactin
  pseudopregnancy
Aging humans
  magnitude matching, 125
  olfaction loss, 125
  sleep measurement, 311
  sleep patterns, 311
  sleep structure, 311
  sound, 125
  subjective responses, 311

Aging rat
anesthesia, 101
cerebral autoregulation, 101
cerebrovascular system, 101
hippocampus, 121
hypertension, genetic, 101
hypotension, drug-induced, 101
neurotransmitter actions, 121
Aluminum chloride, 11
neurofibrillary changes
rabbits
Aluminum powder, 209
axonopathy
encephalomyelopathy
muscular atrophy
neurofibrillary degeneration
rabbits
Alzheimer's disease
acetylcholine, 105
circadian rhythms, 371
cognition, 371
delirium, 371
dementia, 371
depression, 361
electroencephalogram, 361
etiology, 145
gerontological studies, subject recruitment, 77
human studies, 93, 117, 361, 371
insulin-like growth factors, 117
memory, 105
mental function, 361
philothermal response, 93
physostigmine, 77, 105
polymorphonuclear leukocytes, 93
senile dementia, 117
signal detectability analysis, 105
sleep, 361
sleep stages, 371
somatomedins, 117
transmissibility, 145
Amitriptyline, 55
antimuscarinic drugs
computerized stage analysis
human studies, normal aged
memory, anterograde
tricyclic antidepressants
verbal recall, selective disruption
Amnesia, 133
amphetamines
carbon dioxide
memory
morphine
Amphetamines, 133
amnesia
carbon dioxide
memory
morphine
Anesthesia
aged rats, 141
aging rat, 101
carbon dioxide, 141
cerebral autoregulation, 101
cerebral metabolism, 141
cerebrovascular response, 141
cerebrovascular system, 101
hypercapnia, 141
hypertension, genetic, 101
hypotension, drug-induced, 101
Antimuscarinic drugs, 55
amitriptyline
computerized stage analysis
human studies, normal aged
memory, anterograde
tricyclic antidepressants
verbal recall, selective disruption
Antiparkinsonian drugs, 379
aging
benzodiazepines
corticosteroids
human studies
sleep
tricyclic antidepressants
Apnea
aging, 329
chemoreceptor responses, 337
hemoglobin desaturation, 337
human studies, 329
human studies, older males, 337
hypnotic drugs, 329
hypopnea, 337
nocturnal myoclonus, 329
periodic movements, 329
sleep, 329
sleep fragmentation, 337
sleep-related breathing disorders, 337
Astrocytic hypertrophy, 179
aging
cerebral cortex
synaptic remodelling
Auditory brainstem responses, 163
age differences
auditory evoked potentials
cats
central conduction time
click threshold
Auditory evoked potentials, 163
age differences
auditory brainstem responses
cats
central conduction time
click threshold
Axonopathy, 209
aluminum powder
encephalomyelopathy
muscular atrophy
neurofibrillary degeneration
rabbits

Benzodiazepine binding sites, 227
aging
GABA binding sites
loss of binding sites interaction
retina
Benzodiazepines, 379
aging
antiparkinsonian drugs
corticosteroids
human studies
sleep
tricyclic antidepressants
Biorhythms, 287
aging
chronobiology
circadian rhythm
neurobiology
sleep
Brain
amygdala, 233
anterior horns, 209
brainstem, 23, 163, 187
caudate putamen, 173
cerebellum, 23, 173
cerebral cortex, 173, 179, 233
cerebrum, 11
chalices of Held, 187
globus pallidus, 173
hippocampus, 23, 121, 173, 233
hypothalamus, 23, 173, 233
inferior colliculus, 43

limbic system, 23
medial frontal cortex, 69
midbrain, 233
olfactory bulb, 173, 197
pons-medulla oblongata, 233
prefrontal cortex, 69
spinal cord, 11, 23
striatum, 23
substantia nigra, 23
superior colliculus, 43
superior olive, 187
thalamus, 233
trapezoid body, medial nucleus, 187
Brainstem neuron loss, 187
age pigment
aging auditory system
superior olive
trapezoid body, medial nucleus

C57BL/6 mice, 31
aging
estrous cycle
FSH
LH
prolactin
Capillaries, 197
electron microscopy
light microscopy
olfactory bulb
Carbon dioxide
aged rats, 141
amnesia, 133
amphetamines, 133
anesthesia, 141
cerebral metabolism, 141
cerebrovascular response, 141
hypercapnia, 141
memory, 133
morphine, 133
Cats, 163
age differences
auditory brainstem responses
auditory evoked potentials
central conduction time
click threshold
CB-154, 247
aging Fischer 344 rats
hyperprolactinemia
LHRH
prolactin
pseudopregnancy
Central conduction time, 163
age differences
auditory brainstem responses
auditory evoked potentials
cats
click threshold
Central monoaminergic system, 237
stress, cold
thermoregulation
Central nervous system, 23
aging
dopamine metabolism
noradrenergic system
norepinephrine metabolism
serotonin metabolism
tyrosine hydroxylase metabolism
Cerebral autoregulation, 101
aging rat
anesthesia
cerebrovascular system
hypertension, genetic
hypotension, drug-induced

Cerebral cortex, 179
aging
astrocytic hypertrophy
synaptic remodelling
Cerebral metabolism, 141
aged rats
anesthesia
carbon dioxide
cerebrovascular response
hypercapnia
Cerebrovascular response, 141
aged rats
anesthesia
carbon dioxide
cerebral metabolism
hypercapnia
Cerebrovascular system, 101
aging rat
anesthesia
cerebral autoregulation
hypertension, genetic
hypotension, drug-induced
Chemoreceptor responses, 337
apnea
hemoglobin desaturation
human studies, older males
hypopnea
sleep fragmentation
sleep-related breathing disorders
Choline acetyltransferase, 259
muscarinic receptors
L(-)quinuclidinyl benzilate
Cholinergic systems, 173
lipid peroxides
neurotransmitters
vitamin E deficiency
Chronobiology, 287
aging
biorhythms
circadian rhythm
neurobiology
sleep
Circadian rhythms
age differences, 299
aging, 287
Alzheimer's disease, 371
biorhythms, 287
chronobiology, 287
cognition, 371
delirium, 371
dementia, 371
entrainment, 299
human studies, 299, 371
neurobiology, 287
sleep, 287, 299
sleep stages, 371
temperature, 299
Click threshold, 163
age differences
auditory brainstem responses
auditory evoked potentials
cats
central conduction time
Cognition
aging, 1
Alzheimer's disease, 371
circadian rhythms, 371
delirium, 371
dementia, 371
heart rate, 1
human studies, 371
information processing, 1
reaction time, 1
sleep stages, 371
sustained potential, 1

Computerized stage analysis, 55
amitriptyline
antimuscarinic drugs
human studies, normal aged
memory, anterograde
tricyclic antidepressants
verbal recall, selective disruption
Corticosteroids, 379
aging
antiparkinsonian drugs
benzodiazepines
human studies
sleep
tricyclic antidepressants
Cortisol levels, 37
aging and hormonal changes
diurnal variations
estradiol levels
LH levels
rhesus monkeys
sexual behavior, male monkey
testosterone levels
Cross-sectional studies, 43
aging and neuronal activity
deoxyglucose mapping
longitudinal studies
multiple unit recording

Delirium, 371
Alzheimer's disease
circadian rhythms
cognition
dementia
human studies
sleep stages
Dementia, 371
Alzheimer's disease
circadian rhythms
cognition
human studies
sleep stages
Deoxyglucose mapping, 43
aging and neuronal activity
cross-sectional studies
longitudinal studies
multiple unit recording
Depression
aging, 351
Alzheimer's dementia, 361
electroencephalogram, 361
electroencephalograph, 351
human studies, 361
mental function, 361
sleep, 351, 361
Diurnal variations, 37
aging and hormonal changes
cortisol levels
estradiol levels
LH levels
rhesus monkeys
sexual behavior, male monkey
testosterone levels
Dopamine metabolism, 23
aging
central nervous system
noradrenergic system
norepinephrine metabolism
serotonin metabolism
tyrosine hydroxylase metabolism
Drug
aluminum, 209
aluminum chloride, 11
amitriptyline, 55
amphetamine, 133
benzodiazepine, 227
carbon dioxide, 125, 133
CB-154, 247
p-chlorophenylalanine, 253
^{14}C-deoxyglucose, 43
L-DOPA, 253
ethanol, 243
GABA, 227
5-hydroxytryptophan, 253
iso-amyl butyrate, 125
morphine, 133
nitroglycerin, 101
physostigmine, 77, 105
propanolol hydrochloride, 379
L(–)quinuclidinyl benzilate, 259
sodium nitroprusside, 101

Electroencephalogram, 361
Alzheimer's dementia
depression
human studies
mental function
sleep
Electroencephalograph, 351
aging
depression
sleep
Electron microscopy, 197
capillaries
light microscopy
olfactory bulb
Encephalomyelopathy, 209
aluminum powder
axonopathy
muscular atrophy
neurofibrillary degeneration
rabbits
Entrainment, 299
age differences
circadian rhythms
human studies
sleep
temperature
Estradiol levels, 37
aging and hormonal changes
cortisol levels
diurnal variations
LH levels
rhesus monkeys
sexual behavior, male monkey
testosterone levels
Estrous cycle
aging, 31
aging, female rat, 253
C57BL/6 mice, 31
FSH, 31
LH, 31
luteinizing hormone surges, 253
neuroleptics, 253
prolactin, 31
serotonin, 253
Ethanol, 243
age differences
hypothermia, alcohol-induced
righting response
Etiology, 145
Alzheimer's disease
transmissibility

Follicle-stimulating hormone (FSH), 31
aging
C57BL/6 mice
estrous cycle

LH
prolactin

GABA binding sites, 227
aging
benzodiazepine binding sites
loss of binding sites interaction
retina
Geriatric pharmacology, 61
memory
monkeys
neuropeptides
Gerontological studies, subject recruitment, 77
Alzheimer's disease
physostigmine

Heart rate, 1
aging
cognition
information processing
reaction time
sustained potential
Hemoglobin desaturation, 337
apnea
chemoreceptor responses
human studies, older males
hypopnea
sleep fragmentation
sleep-related breathing disorders
Hippocampus, 121
aging rat
neurotransmitter actions
Hormone
cortisol, 37
estradiol, 37, 253
FSH, 31
LHRH, 247
luteinizing hormone (LH), 31, 37, 253
progesterone, 253
prolactin, 31, 247
testosterone, 37
Human studies
age differences, 299
aging, 321, 329, 379
Alzheimer's disease, 93, 117, 361, 371
antiparkinsonian drugs, 379
apnea, 329
benzodiazepines, 379
circadian rhythms, 299, 371
cognition, 371
corticosteroids, 379
delirium, 371
dementia, 371
depression, 361
electroencephalogram, 361
entrainment, 299
human studies, 361
hypnotic drugs, 329
insulin-like growth factors, 117
nocturnal myoclonus, 329
periodic movements, 329
philothermal response, 93
polymorphonuclear leukocytes, 93
senile dementia, 117
sleep, 299, 329, 361, 379
sleep fragmentation, 321
sleep stages, 321, 371
somatomedins, 117
temperature, 299
tricyclic antidepressants, 379
Human studies, normal aged, 55
amitriptyline
antimuscarinic drugs
computerized stage analysis
memory, anterograde
tricyclic antidepressants
verbal recall, selective disruption
Human studies, older males, 337
apnea
chemoreceptor responses
hemoglobin desaturation
hypopnea
sleep fragmentation
sleep-related breathing disorders
Hypercapnia, 141
aged rats
anesthesia
carbon dioxide
cerebral metabolism
cerebrovascular response
Hyperprolactinemia, 247
aging Fischer 344 rats
CB-154
LHRH
prolactin
pseudopregnancy
Hypertension, genetic, 101
aging rat
anesthesia
cerebral autoregulation
cerebrovascular system
hypotension, drug-induced
Hypnotic drugs, 329
aging
apnea
human studies
nocturnal myoclonus
periodic movements
sleep
Hypopnea, 337
apnea
chemoreceptor responses
hemoglobin desaturation
human studies, older males
sleep fragmentation
sleep-related breathing disorders
Hypotension, drug-induced, 101
aging rat
anesthesia
cerebral autoregulation
cerebrovascular system
hypertension, genetic
Hypothermia, alcohol-induced, 243
age differences
ethanol
righting response
Hypoxia, 263
norepinephrine
obstructive apnea
sleep apnea
sympathetic activity

Information processing, 1
aging
cognition
heart rate
reaction time
sustained potential
Insulin-like growth factors, 117
Alzheimer's disease
human studies
senile dementia
somatomedins

Lecithin, 223
age differences
maze learning

vitamin E
Lesions, medial frontal cortex, 69
aging
recovery of function
serial lesion effect
spatial alternation
LH levels, 37
aging and hormonal changes
cortisol levels
diurnal variations
estradiol levels
rhesus monkeys
sexual behavior, male monkey
testosterone levels
LHRH, 247
aging Fischer 344 rats
CB-154
hyperprolactinemia
prolactin
pseudopregnancy
Light microscopy, 197
capillaries
electron microscopy
olfactory bulb
Lipid peroxides, 173
cholinergic systems
neurotransmitters
vitamin E deficiency
Longitudinal studies, 43
aging and neuronal activity
cross-sectional studies
deoxyglucose mapping
multiple unit recording
Loss of binding sites interaction, 227
aging
benzodiazepine binding sites
GABA binding sites
retina
Luteinizing hormone (LH), 31
aging
C57BL/6 mice
estrous cycle
FSH
prolactin
Luteinizing hormone surges, 253
aging, female rat
estrous cycle
neuroleptics
serotonin

Magnitude matching, 125
aging, humans
olfaction loss
sound
Maze learning, 223
age differences
lecithin
vitamin E
Memory
acetylcholine, 105
Alzheimer's disease, 105
amitriptyline, 55
amnesia, 133
amphetamines, 133
antimuscarinic drugs, 55
carbon dioxide, 133
computerized stage analysis, 55
geriatric pharmacology, 61
human studies, normal aged, 55
monkeys, 61
morphine, 133
neuropeptides, 61
physostigmine, 105
signal detectability analysis, 105
tricyclic antidepressants, 55
verbal recall, selective disruption, 55
Mental function, 361
Alzheimer's dementia
depression
electroencephalogram
human studies
mental function
sleep
Method
deoxyglucose mapping, 43
electron microscopy, 197
light microscopy, 197
magnitude matching, 125
multiple unit recording, 43
signal detectability analysis, 105
3-Methoxy-4-hydroxyphenylethyleneglycol sulfate (MHPG-SO_4), 233
aging
noradrenaline metabolism
stress
Monkeys, 61
geriatric pharmacology
memory
neuropeptides
Morphine, 133
amnesia
amphetamines
carbon dioxide
memory
Multiple unit recording, 43
aging and neuronal activity
cross-sectional studies
deoxyglucose mapping
longitudinal studies
Muscarinic receptors, 259
choline acetyltransferase
L(–)quinuclidinyl benzilate
Muscular atrophy, 209
aluminum powder
axonopathy
encephalomyelopathy
neurofibrillary degeneration
rabbits

Neurobiology, 287
aging
biorhythms
chronobiology
circadian rhythm
sleep
Neurofibrillary changes, 11
aluminum chloride
rabbits
Neurofibrillary degeneration, 209
aluminum powder
axonopathy
encephalomyelopathy
muscular atrophy
rabbits
Neuroleptics, 253
aging, female rat
estrous cycle
luteinizing hormone
serotonin
Neuropeptides, 61
geriatric pharmacology
memory
monkeys
Neurotransmitter actions, 121
aging rat
hippocampus
Neurotransmitters, 173
cholinergic systems
lipid peroxides
vitamin E deficiency

Nocturnal myoclonus, 329
aging
apnea
human studies
hypnotic drugs
periodic movements
sleep
Noradrenaline metabolism, 233
aging
MHPG-SO_4
stress
Noradrenergic system, 23
aging
central nervous system
dopamine metabolism
norepinephrine metabolism
serotonin metabolism
tyrosine hydroxylase metabolism
Norepinephrine, 263
hypoxia
obstructive apnea
sleep apnea
sympathetic activity
Norepinephrine metabolism, 23
aging
central nervous system
dopamine metabolism
noradrenergic system
serotonin metabolism
tyrosine hydroxylase metabolism

Obstructive apnea, 263
hypoxia
norepinephrine
sleep apnea
sympathetic activity
Olfaction loss, 125
aging, humans
magnitude matching
sound
Olfactory bulb, 197
capillaries
electron microscopy
light microscopy

Peptide
$ACTH_{4-10}$, 61
oxytocin, 61
somatostatin, 61, 117
vasopressin, 61
Periodic movements, 329
aging
apnea
human studies
hypnotic drugs
nocturnal myoclonus
sleep
Philothermal response, 93
Alzheimer's disease
human studies
polymorphonuclear leukocytes
Physostigmine
acetylcholine, 105
Alzheimer's disease, 77, 105
gerontological studies, subject recruitment, 77
memory, 105
signal detectability analysis, 105
Polymorphonuclear leukocytes, 93
Alzheimer's disease
human studies
philothermal response
Premenopausal females, 111
primates
sociosexual responsivity
Primates, 111
premenopausal females
sociosexual responsivity
Prolactin
aging, 31
aging Fischer 344 rats, 247
C57BL/6 mice, 31
CB-154, 247
estrous cycle, 31
FSH, 31
hyperprolactinemia, 247
LH, 31
LHRH, 247
pseudopregnancy, 247
Pseudopregnancy, 247
aging Fischer 344 rats
CB-154
hyperprolactinemia
LHRH
prolactin

L(–)Quinuclidinyl benzilate, 259
choline acetyltransferase
muscarinic receptors

Rabbits
aluminum chloride, 11
aluminum powder, 209
axonopathy, 209
encephalomyelopathy, 209
muscular atrophy, 209
neurofibrillary changes, 11
neurofibrillary degeneration, 209
Reaction time, 1
aging
cognition
heart rate
information processing
sustained potential
Recovery of function, 69
aging
lesions, medial frontal cortex
serial lesion effect
spatial alternation
Retina, 227
aging
benzodiazepine binding sites
GABA binding sites
loss of binding sites interaction
Rhesus monkeys, 37
aging and hormonal changes
cortisol levels
diurnal variations
estradiol levels
LH levels
sexual behavior, male monkey
testosterone levels
Righting response, 243
age differences
hypothermia, alcohol-induced

Senile dementia, 117
Alzheimer's disease
human studies
insulin-like growth factors
somatomedins
Serial lesion effect, 69
aging
lesions, medial frontal cortex
recovery of function
spatial alternation

Serotonin, 253
aging, female rat
estrous cycle
luteinizing hormone
neuroleptics
Serotonin metabolism, 23
aging
central nervous system
dopamine metabolism
noradrenergic system
norepinephrine metabolism
tyrosine hydroxylase metabolism
Sexual behavior, male monkey, 37
aging and hormonal changes
cortisol levels
diurnal variations
estradiol levels
LH levels
rhesus monkeys
testosterone levels
Signal detectability analysis, 105
acetylcholine
Alzheimer's disease
memory
physostigmine
Sleep
age differences, 299
aging, 287, 329, 351, 379
Alzheimer's dementia, 361
antiparkinsonian drugs, 379
apnea, 329
circadian rhythms, 299
benzodiazepines, 379
biorhythms, 287
chronobiology, 287
circadian rhythm, 287
corticosteroids, 379
depression, 351, 361
electroencephalograph, 351
entrainment, 299
human studies, 299, 329, 361, 379
hypnotic drugs, 329
mental function, 361
neurobiology, 287
nocturnal myoclonus, 329
periodic movements, 329
sleep, 287, 361
temperature, 299
tricyclic antidepressants, 379
Sleep apnea, 263
hypoxia
norepinephrine
obstructive apnea
sympathetic activity
Sleep fragmentation
aging, 321
apnea, 337
chemoreceptor responses, 337
hemoglobin desaturation, 337
human studies, 321
human studies, older males, 337
hypopnea, 337
sleep-related breathing disorders, 337
sleep stages, 321
Sleep measurement, 311
aging humans
sleep measurement
sleep patterns
subjective responses
Sleep patterns, 311
aging humans
sleep measurements
sleep structure
subjective responses
Sleep-related breathing disorders, 337
apnea
chemoreceptor responses
hemoglobin desaturation
human studies, older males
hypopnea
sleep fragmentation
Sleep stages
aging, 321
Alzheimer's disease, 371
circadian rhythms, 371
cognition, 371
delirium, 371
dementia, 371
human studies, 321, 371
sleep fragmentation, 321
sleep stages, 371
Sleep structure, 311
aging humans
sleep measurement
sleep patterns
sleep structure
subjective responses
Sociosexual responsivity, 111
premenopausal females
primates
Somatomedins, 117
Alzheimer's disease
human studies
insulin-like growth factors
senile dementia
Sound, 125
aging, humans
magnitude matching
olfaction loss
Spatial alternation, 69
aging
lesions, medial frontal cortex
recovery of function
serial lesion effect
Stress, 233
aging
MHPG-SO_4
noradrenaline metabolism
Stress, cold, 237
central monoaminergic system
thermoregulation
Subjective responses, 311
aging humans
sleep measurement
sleep patterns
sleep structure
Superior olive, 187
age pigment
aging auditory system
brainstem neuron loss
trapezoid body, medial nucleus
Sustained potential, 1
aging
cognition
heart rate
information processing
reaction time
Sympathetic activity, 263
hypoxia
norepinephrine
obstructive apnea
sleep apnea
Synaptic remodelling, 179
aging
astrocytic hypertrophy
cerebral cortex

Temperature, 299
  age differences
  circadian rhythms
  entrainment
  human studies
  sleep
Testosterone levels, 37
  aging and hormonal changes
  cortisol levels
  diurnal variations
  estradiol levels
  LH levels
  rhesus monkeys
  sexual behavior, male monkey
Thermoregulation, 237
  central monoaminergic system
  stress, cold
Tricyclic antidepressants
  aging, 379
  amitriptyline, 55
  antimuscarinic drugs, 55
  antiparkinsonian drugs, 379
  benzodiazepines, 379
  computerized stage analysis, 55
  corticosteroids, 379
  human studies, 379
  human studies, normal aged, 55
  memory, anterograde, 55
  sleep, 379
  verbal recall, selective disruption, 55
Transmissibility, 145
  Alzheimer's disease
  etiology
Trapezoid body, medial nucleus, 187
  age pigment
  aging auditory system
  brainstem neuron loss
  superior olive
Tyrosine hydroxylase metabolism, 23
  aging
  central nervous system
  dopamine metabolism
  noradrenergic system
  norepinephrine metabolism
  serotonin metabolism

Verbal recall, selective disruption, 55
  amitriptyline
  antimuscarinic drugs
  computerized stage analysis
  human studies, normal aged
  memory, anterograde
  tricyclic antidepressants
Vitamin E, 223
  age differences
  lecithin
  maze learning
Vitamin E deficiency, 173
  cholinergic systems
  lipid peroxides
  neurotraansmitters

AUTHOR INDEX

ADAMS, I., 179
ALBRECHT, R. F., 101, 141
ALGERI, S., 23, 237
ANCOLI-ISRAEL, S., 329
ARMBRECHT, H. J., 243

BARTUS, R. T., 61, 83, 85, 87, 161, 267, 271, 273, 283
BEAHM, E., 337
BEER, B., 61
BIGGIO, G., 227
BLANTON, F. L., 111
BOKAN, J., 361
BRANCONNIER, R. J., 55
BRIGGS, R. S., 259
BROWN, E. D., 321
BUCHWALD, J., 163
BUGIANI, O., 209

CAIN, W. S., 125
CALDERINI, G., 23, 227, 237
CARSKADON, M. A., 321
CASEY, M. A., 187
CHAMBERS, K. C., 37
CLARK, E. O., 93
COBLE, P. A., 351
COLE, J. O., 55
COLLINS, T. J., 31
CONCAS, A., 227
COOK, P. J., 259
CORDA, M. G., 227
CORWIN, J. V., 69
CZEISLER, C. A., 299

DAVIS, K. L., 77, 105, 145
DEAN, R. L., 61
DEMENT, W. C., 321
DEUTSCH, S. I., 145
DEVITT, D. R., 55
DUSTMAN, R. E., 1

EBERT, M., 371
ENZELL, K., 117
ESTES, K. S., 247

FELDMAN, M. L., 187
FERRIS, S. H., 149
FU, T.-K., 93

GARDNER, A., 117
GERBER, C., 361
GHANTA, V. K., 223
GHETTI, B., 209
GIBLIN, E. C., 263
GILLIN, J. C., 371
GOLCZEWSKI, J. A., 223
GUARNERI, P., 227
GUILLEMINAULT, C., 379

HALL, K., 117
HALTER, J. B., 263
HARRISON, J., 163
HINDS, J. W., 197
HIRAMOTO, R. N., 223
HOAKI, Y., 233
HOFFMAN, W. E., 101, 141

IDA, Y., 233
IIMORI, K., 233
INGRAM, D. K., 287

JARVIK, L. F., 93
JENSEN, G. D., 111
JONES, D. G., 179

KALRA, S. P., 247
KAYE, W., 371
KESSLER, J. O., 93
KHACHATURIAN, Z. S., 81, 267
KOHNO, Y., 233
KRIPKE, D. F., 329
KUPFER, D. J., 351

LEVY, M. I., 77
LITTNER, M., 337
LOEWENSTEIN, R. J., 371
LOMUSCIO, G., 23, 237
LONDON, E. D., 287

McGEER, E. G., 173
McGEER, P. L., 173
McGINTY, D., 337
McNELLY, N. A., 197

MALMO, H. P., 43
MALMO, R. B., 43
MATSUYAMA, S. S., 93
MENDELSON, W. B., 371
MESSING, R. B., 133
MILETICH, D. J., 101, 141
MILLER, N. E., 283
MOHS, R. C., 77, 105, 145
MOLINE, M. L., 299
MORAWSKI, R., 117

NAGASAKI, N., 233
NAKAGAWA, R., 233
NICKOLSON, V. J., 133

NODA, Y., 173
NONNEMAN, A. J., 69

OKUDAIRA, N., 329

PARKENING, T. A., 31
PESKIND, E., 361
PETERSEN, M. M., 259
PHOENIX, C. H., 37
PLANTINGS, A., 125
PODLESNY, J. A., 1
PONZIO, F., 23, 237
PRINZ, P. N., 263, 361

RASKIND, M., 361
RESKO, J. A., 37
REYNOLDS, C. F., III, 351
REYNOLDS, M. A., 287
RIGTER, H., 133
ROSEN, W. G., 77
RUIZ-PRIMO, E., 337

SALIS, M., 227
SARA, V. R., 117
SASSENRATH, E. N., 111
SCHOENE, R. B., 263
SEGAL, M., 121
SHAW, D. H., 351
SHEK, J. W., 11
SILVESTRI, R., 379
SIMPKINS, J. W., 247
SMITH, E. R., 31
SOWERS, J., 337
SPERA, K. F., 55
STEVENS, J. C., 125
STURMAN, J. A., 11

TANAKA, M., 233
TOFFANO, G., 23, 227, 237
TSAI, S. Y., 93
TSUDA, A., 233

ULRICH, R. F., 351

VALENTINO, L., 69
VANTINI, G., 23, 237
VICEDOMINI, J. P., 69
VITALIANO, P. P., 361
VITIELLO, M. V., 263, 361

WALKER, R. F., 253
WEBB, W. B., 311
WEINGARTNER, H., 371
WEITZMAN, E. D., 299
WETTERBERG, L., 117
WISNIEWSKI, H. M., 11
WOOD, W. G., 243

YOUNG, E., 337

ZIMMERMAN, J. C., 299